

ERRCS GUIDELINES FOR PROJECTS IN CCSF



Technical and Applicable Codes Guidelines for Design and Installation of Emergency Responders Radio Coverage Systems (ERRCS) in the City and County of San Francisco (CCSF) per the San Francisco Fire Department (SFFD) and the Department of Technology (DT) - Effective 8.17.2020



ERRCS GUIDELINES



INTRODUCTION

Effective 17 August 2020, The San Francisco Fire Department (SFFD) has published specific requirements for approved 2-HR fire resistive coaxial cables to be used in the jurisdiction for ERRC Systems (ERRCS).

You must comply with ALL of the applicable requirements listed when you submit ERRCS permit plans for 2-HR fire resistive coaxial cable.

You should include a copy of these requirements on your ERRCS permit plans and indicate how you comply with each specific applicable requirement (you could use a checklist format).

RFS Technologies has gathered and provided you the DragonSkin information that is required in the sections listed below. To access the documents, click or copy-paste the hyperlink provided in this document.

SECTION F: SFFD AB#2.01-2019 ADDENDUM G SECTION F: PUBLISHED ON THE SFFD WEBSITE

All ERRCS wires and cables (coax, fiber optic, etc.) shall comply with the required pathway survivability level based on the building's type of construction. In all building's portions/areas having 2-HR construction (such as Type IA or IB construction AND 2-HR rated vertical enclosures such as stairways or shafts in Type III and Type V buildings or portions of buildings) pathway survivability level 2 (or 3) shall be required. In all building's portions/areas having less than 2-HR construction (such as Type III or V construction) pathway survivability Level 1 shall be permitted.

(F.1) Per NFPA 1221-2016 Section 9.6.2, pathway survivability shall comply with Section 5.10.

(F.2) Where a Pathway Survivability Level 2 or 3 is required per item F of this Addendum G, it shall comply with any of the options listed in NFPA 1221-2016 Section 5.10.3 or 5.10.4 respectively.

(F.3) If option # 1 of Section 5.10.3 or 5.10.4 is proposed which is "2-HR fire rated circuit integrity (CI) or fire-resistive Cable" – the following items shall be provided on the ERRCS (FIRE ONLY) Permit Plans submittal to be reviewed and approved by the SFFD Plan-Review Section inspector during the ERRCS permit review process:

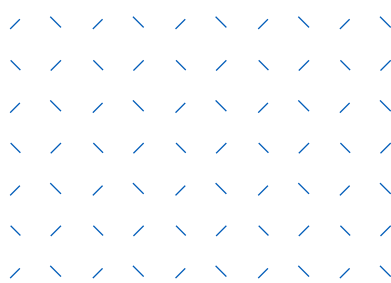
2

SECTION F.3.1

Scanned copy of the cable manufacturer's cut sheets showing the specific UL 2196 (or other approved equivalent) listing for the proposed cable as a 2-HR fire resistive cable.

DOWNLOAD THE CUT SHEET





ERRCS GUIDELINES

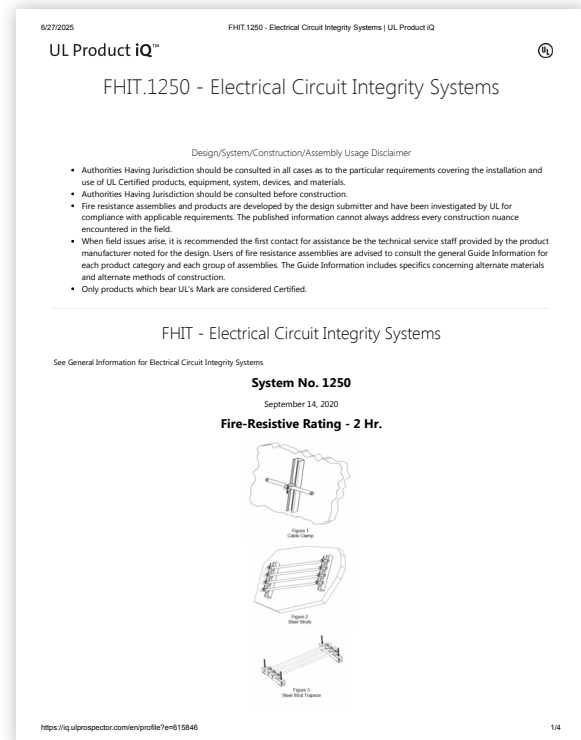


SECTION F.3.2

Scanned copy of the associated UL Fire-Resistive Cable category - FHIT system 1250 (or other approved equivalent) including all specific Manufacturers' Installation Instructions for the proposed cable and its associated attachments to the building structure.

[DOWNLOAD THE FHIT SYSTEM 1250 DOCUMENT](#)

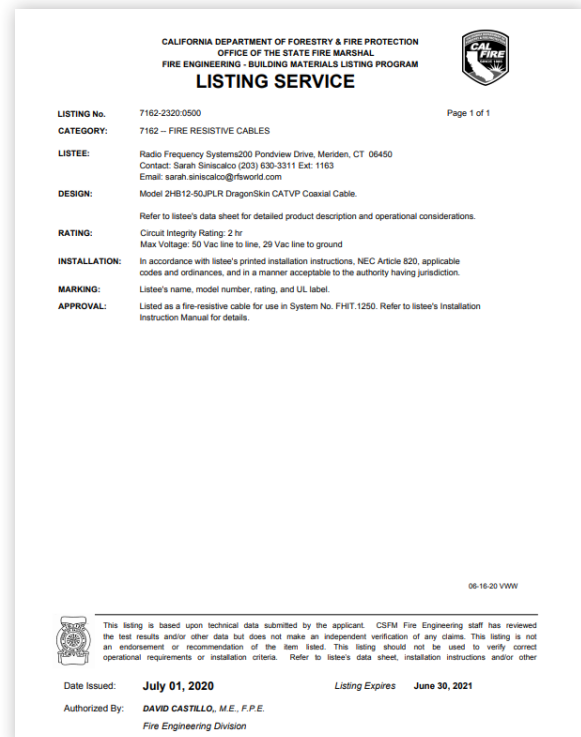
[DOWNLOAD THE INSTALLATION INSTRUCTIONS](#)

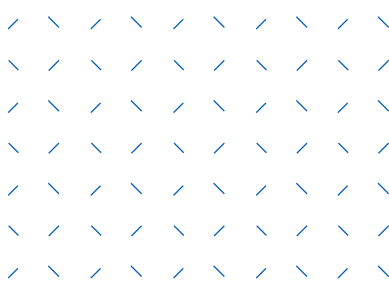


SECTION F.33

Scanned current copy of the CSFM listing sheet for the proposed cable.

[DOWNLOAD THE CSFM LISTING SHEET](#)





ERRCS GUIDE- LINES



SECTION F.3.4

Statement of compliance, from the cable manufacturer, with CEC-2019 Article 820 with specific indication for the UL listing (or other approved equivalent) of this cable as a “Plenum Rated Cable Assembly” - not required to be installed in metallic raceway.

DOWNLOAD DECLARATION OF CONFORMITY

 **RFS Technologies**
an Amphenol Company

Declaration of Conformity

We, RFS Technologies, Inc., 200 Pond View Drive, Meriden, CT 06450, USA, and the undersigned hereby declare under our sole responsibility that the below product(s) conform with the stated standards provided that they are installed, maintained and used in the application for which they are made, with respect of the "professional practices", relevant installation standards and manufacturer's instructions.

APPLICATION OF EC COUNCIL DIRECTIVE(S):

- > Directive 2014/53/EU - Radio Equipment
- > Directive 2011/65/EU - Restriction of the use of certain hazardous substances (RoHS)

CABLE TYPE:

- > RFS Technologies, Inc. DRAGONSKIN™ 1/2" FIRE-RESISTANT UL 2196 CERTIFIED COAXIAL CABLE

CABLE MODEL NO.:

- > 2HB12-56JPLX - Dragonskin fire-resistive cable

STANDARD(S) TO WHICH CONFORMITY IS DECLARED:

- > NFPA 70: National Electrical Code 820 CATVP Cable.
- > NFPA 70: National Electrical Code Article 300 to Article 302.
- > UL1655, Standard for Community-Antenna Television Cables
- > Listed for FRR 2.0 Hours and CATVP, files number R40176, E239351, UL System FHIT 1250
- > NFPA262 Standard Method of Test for Flame Travel and Smoke of Wires and Cables for Use in Air-Handling Spaces
- > NFPA130 Standard for Fixed Guideway Transit and Passenger Rail Systems
- > NFPA 72 National Fire Alarm and Signaling Code
- > NFPA 1221 2019 (section 5.5.1.1) Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems
- > Canadian CSA C-22.2/FT6, UL
- > American Society for Testing & Materials ASTM B-3.
- > American Society for Testing & Materials ASTM B-152.
- > ANSI/UL 2196, Fire Tests for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables

Jan 16 2023
Date of Issue


Asaad Elsaadani, Mechanical Engineer

 06/16/2023
Jack Hu, Mechanical Engineering Manager

Doc #: 606100025 Rev: 2 16 May 2023 Page 1 of 1





Patented © 2020 RFS Technologies. DragonSkin™ is a trademark



www.rfstechnologies.com

